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# USSR Report

MILITARY AFFAIRS

No. 1686

Aviatsiya I Kosmonavtika

No. 12, December 1981

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7 July 1982

USSR REPORT  
MILITARY AFFAIRS

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## AVIATSIYA I KOSMONAVTIKA

No. 12, December 1981

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## AIR FORCES

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Inside front--"Pictorial Report on Exercise 'Zapad-81' by A. Semelyak".

Inside back-- 40th Anniversary of the Battle of Moscow --photographs by A. Semelyak and information from the archives of the Central Palace of Aviation and Cosmonautics imeni M. V. Frunze.

Outside back--Illustration by artist I. Kashichkin accompanying S. Bytko's article "Which Maneuver is More Effective?"

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## AIR FORCES

### FIGHTERS: FIGHTER SUPPORT OF GROUND FORCES DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 12, Dec 81 pp 6-7

[Article by USSR Distinguished Military Pilot Maj Gen Avn L. Supran: "Flight Attacks Battery"]

[Text] The experience of the "Zapad-81" exercise is being utilized extensively in organizing the combat training of air units and subunits in the new training year. The actions of aviation in different tactical and weather conditions are being analyzed, and the experience of the exercise participants is being fully utilized. USSR Distinguished Military Pilot Major General of Aviation L. Supran described one of the typical episodes to our correspondent.

Forcing the river on the move, the "enemy" seized the commanding hills and opened fire on the positions of the motorized riflemen. Attempting to hold him back, the command of the defending troops committed tank subunits and aviation to the combat. Exercise "Zapad-81" began.

Captain V. Zav'yalov's flight was given the mission of annihilating a mortar battery deployed on the slope of one of the hills. The pilots knew from intelligence that the fire positions were concealed in thickets and that their locations could be changed at any moment. The mission was also complicated by the fact that a thick ground fog made the terrain hard to see. In such a situation it was not an easy thing to find the exact location of the target and destroy it.

Zav'yalov gathered his subordinates together before the flight. He had no doubt in their strengths and possibilities. The pilots worked well together, and they had performed complicated missions many times before. Captain G. Nikolayev, the leader of the second pair and a messmate from their school days, had been with the flight for over a year, and he was able to understand his commander intuitively. Senior lieutenants K. Oguzhin and A. Dombrovskiy were of the same caliber. Konstantin, of course, was more emotional than Aleksandr, but only on the ground. In the air, both acted calmly and coolly.

"You know your mission, and the situation's the same," the commander began, "it will be hard to find the target, but we must find it at all costs. There is little time to make the preparations. I suggest approaching the hill from this slope," Zav'yalov pointed to a spot on the map. "It'll provide cover against 'enemy' radar,

and the hilly terrain will make it difficult for the low-altitude SAM sites. Then we'll begin our search at the preset altitude. If we find the batteries to be scattered over a large area, we'll attack them not as a flight but at will in pairs. The hunting might get harder because we'll have to keep an eye on what's going on in the air. Any questions?"

"Comrade Commander, I have a suggestion," Captain Nikolayev spoke up. "Why don't you and Oguzhin look for the batteries while Dombrovskiy and I cover you and keep a lookout?"

"I'll go for that," Zav'yalov supported his subordinate. "But be ready to switch roles."

"We won't let you down," Nikolayev replied, pulling out his well-worn plotting board. "I calculated the course and time in case the situation won't let us work in automatic."

Acquainting himself with the calculations, the commander made a few corrections and ordered the rest to note them down.

The flight of fighter-bombers took off at the scheduled time. Horizontal visibility was good, but the ground was hard to see.

Gathering together in the air, the four assumed their course for the first turning point of the route. The flight commander had made a correct estimate of the situation. Their flight path lay outside the range of the opposing side's radar. The pilots had to stick to the course with jeweler's precision, because the slightest deviation would cause a blip to appear on the radar screens. Zav'yalov knew quite well that specialists of the "enemy" radiotechnical service would be able to capitalize on any carelessness of the pilots.

A river slipped swiftly beneath the wings, and a thick forest appeared beyond it. Like a huge yellow-green blanket, it seemed to be sheltering the ground from the oncoming cold. Beyond the forest was the "front line."

Captain Zav'yalov began his descent at the required moment. The fighter-bombers sped right over the treetops.

"Turn!" the commander ordered his followers, and assuming the new course, he began surveying the terrain carefully. A column of tanks was moving on a forest road, stretched out like a long caterpillar. "Ours," Zav'yalov noted to himself.

A little further on a group of fighters crossed their path. "They're covering the tanks," Zav'yalov deduced. The captain rocked his wings as a signal: "I'm on your side," and he switched on his afterburner. In his periscope he could clearly see the black antenna stubs trailing behind the craft of his followers.

The panorama of combat opened up unexpectedly, awesome in its scale. Smoke from explosions billowed upward wherever one could see. To the right, beyond the river, helicopters had taken on some tanks, and on the left a barrage of fire and smoke rolled forward on the ground--the artillery was doing its job. And in this fire storm the lines of attacking motorized riflemen looked different than ever before.

The sacred land of Belorussia! How much pain it endured during the Great Patriotic War! It was torn apart by the treads of fascist tanks and burned by the tongues of flamethrowers. It still remembers the sobbing of mothers and the cries of orphaned children. And so that this would never happen again, the sons of the great country were now demonstrating to all motherhood their ability to defend their beloved motherland against transgressions by enemies. Here is what Comrade Leonid Il'ich Brezhnev said about them at the 26th CPSU Congress: "The ranks of the motherland's defenders are now filled by the sons and grandsons of the heroes of the Great Patriotic War. They did not experience the harsh trials that fell to the lot of their fathers and grandfathers. They are faithful to the heroic traditions of our army and our people."

Captain Zav'yalov once again looked into his periscope. Oguzhin's airplane was right behind him in tight combat formation, and Nikolayev and Dombrovskiy were following a little higher up. They turned left, and then right.... Zav'yalov anxiously surveyed the airspace.... There were no "enemy" fighters to be seen, and Nikolayev's pair returned to its place.

Suddenly the flight commander clearly felt the certainty that the flight would surely find and annihilate the "enemy" mortars and complete its mission in excellent fashion. His eye ran quickly over the instruments--they were right on course. A river, a shimmering ribbon, flashed by beneath them. The leader began his turn. Hills rushed by beneath the wing. And finally they reached the slope they knew from the map.... Now was the time for total attention. A prime mover could be seen stuck by the road, there were some vehicles a little to the side, and a little further on.... What's that? His heart stood still. Puffs of white smoke followed flashes of what looked like magnesium powder burning. One, a second, a third.... Lined up almost in a straight line. Wary of a mistake, the captain turned his airplane just slightly and stared down once again at the suspicious place. He was right--a mortar battery!

"Target to the left, attack as a flight!" the leader transmitted. "I read you! I see the target!" Nikolayev replied.

"Maneuver!"

The familiar G-force pressed the pilot's body back into the seat. From here on in, the pilots were no longer play-acting; to them, this was the real thing. There was a target down below, and they had found it! A turn, a dive, and the mortar positions appeared with increasing clarity at the cross hairs of the sights. Faster and faster they flew, the airplanes straining as if themselves trying to reduce the attitude angle.

"Steady!" Zav'yalov urged himself, trying to keep the flight parameters closer to the mark. "Now!"

"Drop!" he commanded his followers.

The fighter-bombers slid upward and, turning sharply, they attacked from another direction. Fire raged around the mortar position, but some of the targets to the left remained untouched. The cross hairs settled on them, and in an instant the



hurricane fire of guided missiles transformed what had recently been referred to as combat equipment into piles of scrap.

Once again they climbed. The ground dropped further and further beneath the wing. Now they could take a better look around.

The mortar fire stopped, and the motorized riflemen once again rose to the attack. From above, the pilots could clearly see how efficiently the men interacted with each other. They began crowding the "enemy" with the support of infantry combat vehicles.

"One One Zero, fighters to the right and down!" Captain Nikolayev's voice suddenly broke into the earphones of Zav'yalov's helmet.

Tilting his craft right, the leader noted a pair of airplanes below. In a few seconds they disappeared behind a high column of rising smoke. Estimating the situation in an instant, the flight commander decided to capitalize on this fact. His mind worked efficiently and calmly: The "enemy" would begin a climbing turn, in order to see us better. We'll hide behind this smoke screen.

"One One Two, attack!" he commanded Nikolayev, while he himself began a smooth turn at his former altitude.

Zav'yalov's plan was simple: As soon as the "enemy" fighters turn out of the smoke, they would see his pair, think it to have fallen behind, and try to hit it.

That is exactly what happened. Understanding his commander's plan, Captain Nikolayev and his follower dropped down and circumvented the smoke column. And when they appeared from the other side, the fighters were within the effective cannon range of the fighter bombers. The gun cameras turned on, and the direct hits were recorded on film.

After the battle Zav'yalov's foursome assumed a course to their airfield. They flew cautiously, maintaining maximum watchfulness.

At home, meanwhile, a surprise awaited them: An eloquent flash bulletin announced that Captain Zav'yalov's flight had successfully completed its mission in the first day of exercise "Zapad-81" and annihilated a pair of "enemy" fighters in aerial combat. The political workers and propagandists also worked efficiently, making an effort to inform all personnel of the airmen's successes as soon as possible.

The land shook as the engines roared. The fighter bombers took to the sky. There, beyond the "front line," the "battle" raged.

The pilots of Captain Zav'yalov's flight left the pad, discussing their flight with excitement. They still had many more flights to go, according to the exercise plan, and they did not yet know that during a parade review of the troops participating in the "Zapad-81" exercise, USSR Minister of Defense Marshal of the Soviet Union D. F. Ustinov would say: "The personnel that took part in the exercise performed their military duty selflessly, they displayed courage, initiative and the

ability to act and to use their weapons in combat, and they demonstrated high political maturity, strong will and a readiness to defend our socialist fatherland, our friends and our allies."

They did not know that he was going to say this, but from the very first flight they did everything they could to make these words true.

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## AIR FORCES

### TRANSPORTS: WORK OF PEOPLE'S CONTROLLERS IN MILITARY TRANSPORT DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 12, Dec 81 pp 8-9

[Article by Col V. Baranov, chairman, Military Transport Aviation Committee for People's Control: "Concerns of People's Controllers"]

[Text] The command and the party organizations of military transport aviation are doing a certain amount of work to activate the people's control organs and strengthen their composition on the basis of the requirements in the CPSU Central Committee decree "On Measures for Further Improvement of the Work of People's Control Organs and Reinforcement of Party Leadership of Them in Connection With Adoption of the Law on People's Control in the USSR" and on the basis of instructions pertaining to this issue contained within the Accountability Report of the CPSU Central Committee to the 26th Party Congress. The training of our people's controllers is improving. Special attention is being devoted to teaching them the effective forms and methods of organizing control and inspection of action taken in the execution of decisions of the party and government and orders and directives of the USSR minister of defense, the chiefs of the Main Political Directorate of the Soviet Army and Navy and the commander in chief of the air force concerned with fighting mismanagement and waste, with economy and thrift and with strengthening state, planning and labor discipline in the troops. The chairmen of the people's control groups regularly meet to analyze the results of work done in specific periods of time, to generalize the positive experience, to reveal the shortcomings and to plan the ways of correcting them.

Commanders, political organs and party organizations have accumulated experience in managing organs of people's control in military transport aviation units and sub-units. This is having a positive influence on the combat readiness and fighting efficiency of the military collectives. Thus the personnel of the unit in which Officer V. Zvorygin takes an active part in the people's control group has enjoyed great successes. The unit is fighting for economization of fuel, power and water, and it has proclaimed a decisive battle against waste and mismanagement. Joint meetings of the party bureau and people's control group are often held for the purposes of thoroughly analyzing the ways and methods of economizing on fuel and lubricants, and the airmen suggest concrete proposals and criticize the negligent.

Once the people's control group headed by Captain V. Zvorygin carefully inspected the technical condition of containers and equipment at a POL dump at which Warrant Officer I. Kovalenko works. They found that the containers were not being cleaned

often enough, as a result of which mechanical impurities were getting into the fuel. This was causing premature wear of motor vehicle engines. On instructions from the people's controllers, the unit command strictly punished the chief of the POL dump for the mistakes. The shortcomings were corrected in short time. On orders from the party bureau, Captain N. Mishchenko, a member of the people's control group, placed the work of the fueling point and the POL dump under his surveillance. Now the POL is always properly accounted for, and the documents are being maintained in exemplary fashion.

Complying with a decision made at a party meeting, activists created multicolored displays describing the work methods of the best drivers and located them in the motor pool and in the classrooms. Texts accompanying the displays described the basic causes of overconsumption of fuel and oils and indicated the methods of correcting them. The unit's communists validly believe that all airmen in the sub-units must take part in POL economization without exception. This was reflected in the individual socialist pledges adopted by the soldiers for the new training year.

Competent organization of the socialist competition among the drivers, unweakening control over the operation of equipment, and a number of other measures are making it possible to save large quantities of fuel and lubricants.

Here is another example attesting to the fact that the political section deeply analyzes the work of the people's control groups and posts and provides assistance to commanders and party organizations trying to correct shortcomings. Not that long ago the political section examined the question of party leadership of the activity of public inspectors in the regiment in which this work is headed by Lieutenant Colonel A. Nikitin. The party committee turned its attention to the effort being made by people's controllers to seek reserves for more effective use of the training material base and for compliance with the rules of operation and maintenance of aviation equipment. The party committee fulfilled the recommendations of the political organ. The party activists explained the importance of this mission to the people's controllers, and advised them how they could best complete it.

The unannounced inspection was headed by Lieutenant Colonel A. Nikitin. Having checked out the facts, a little while later he reported to the command and the party committee that there were unutilized reserves in the effort to improve operation of aviation equipment and armament, and he suggested proposals for ways to make more effective use of the training base. The commander published the appropriate order on the basis of the inspection results.

However, it should be emphasized that in light of party requirements and the Law on Peoples Control, as well as in view of the continually growing scale and complexity of maintaining high combat readiness in the troops, and because of the need for raising the level of combat and political training, we do not have the right to exaggerate the results of our work. The shortcomings noted in the CPSU Central Committee in the activities of people's control organs pertain fully to the committee and to the groups and posts of military transport aviation units. Analysis of the causes behind violations made in the last training year showed that people's controllers of some military units often ignore abuses, that they sometimes fail to display enough exactingness toward the violators of state and financial discipline and that they do not always take decisive steps to eliminate such phenomena.

As an example the following fact caused us to do some serious thinking. Bad behavior and violations of state discipline were being revealed by communist leaders only when inspections were conducted in response to letters and complaints. This was an indication that the people's controllers were not working hard enough and that they were not maintaining ties with the masses.

A decision was made at meetings of the political organ chiefs and the secretaries of the party committees and bureaus to remind the leaders of the people's control organs that they had to consider the opinions of the people and respond attentively to signs of trouble in the units.

The meetings were preceded by a deep inspection of the work being done by people's control organs to fight mismanagement and waste. Many shortcomings were revealed. For example the audits of financial and business activities were not being conducted adequately by people's control groups in which CPSU members V. Stadnik and A. Strashko were active, even though cases of loss and misappropriation of state property had been discovered. Such things happened, in my opinion, because the status of things was not analyzed adequately before such inspections.

Because people's controllers fail to study the issues deeply beforehand, while preparing for an audit, the evaluations they arrive at are often unobjective. Thus it was concluded from mass inspections of fuel and power use in some aviation units that economization was significant; a commission higher up the chain of command, however, found that these military collectives were not economizing on energy resources very effectively. It was also found that some inspectors were only going through the motions when responding to complaints of losses of material valuables and poor organization of food services in some flight technicians' and enlisted mess halls. I believe that such an approach generates indifference and complacency in officials, which in the final analysis leads to repetition of the violations.

V. I. Lenin emphasized that control must be unprejudicial and objective, and that the conclusions of inspections must be thoroughly and deeply grounded. It would be useful to turn the attention of members of the people's control groups and posts of the flight units to the need for deeply and thoroughly examining the issues which directly influence combat readiness, flight safety, the reliability with which aviation equipment is operated and the effectiveness of its repair. As an example in the last training year some units filled their airplanes with low-grade fuel, they let the airplanes fly with unresolved defects, and they violated the maintenance procedures, which naturally had an unfavorable effect on flight safety.

Of course, the local commanders and party organizations did take steps to correct the shortcomings. But as far as the people's control groups are concerned, they did not conduct any serious inspections and audits during that period.

I would hope that the people's control groups and posts of the material-technical support unit would check the quality of airfield preparation, the readiness of ground flight support resources and the order of storing and using spare parts more frequently. Last year there were times in one of the troop units when faulty special transportation was provided for flight support, when such transportation was provided late, and even when airplanes had to linger on the ground due to the absence of the required spare parts. All of this would not have occurred, had the people's controllers penetrated deeply into the combat training of the units and subunits.

Also deserving of reproach are those party organizations which do not always deeply analyze the results of inspections and which do not effectively manage the people's controllers. The quality and efficiency of the work of people's control organs depends to a great extent on how much political organs and party organizations help them solve the most pressing problems, on how attentively they examine the inspection results and on what steps are taken to eliminate shortcomings revealed by people's controllers.

The following question begs itself: The issues associated with the activities of people's control organs and conclusions based on their inspections must be examined regularly together with the executive personnel, in the political organs at meetings of the party committees and bureaus and in party meetings, and efficient steps should be taken to correct the shortcomings. More must be asked of communists voted into people's control organs, and their reports on the work they are doing must be heard more frequently in the party organizations.

The units and subunits of military transport aviation have now organized close interaction between people's controllers and the members of internal inspection commissions as well as financial auditing services, party, Komsomol and trade union organizations and military and labor collectives. The visibility of the work of people's controllers has risen, and the committees, groups and posts have become more responsible to the collectives that elected them. The rallies, seminars and procedural lessons they attend have improved in quality.

The people's control organs guide all of their activities by what Comrade L. I. Brezhnev said in the Accountability Report of the CPSU Central Committee to the 26th Party Congress: "Universal people's control of the work of administrative organs and officials is a necessary component of Soviet democracy. Not a single violation, not a single case of misappropriation, waste and undisciplined behavior must slip by the watchful gaze of the people's controllers. To act more energetically, to act more aggressively--this is what their CPSU Central Committee wants from them."

The conclusions in the Accountability Report and the materials of the 26th CPSU Congress determine the present content of all of the activities of the people's control organs of military transport aviation units and subunits, and they serve as an inexhaustible source for improving their work style. Our people's controllers are rightfully proud that they have been entrusted with such important work: monitoring fulfillment of party directives, Soviet laws and government decisions concerned with fighting everything that does harm to the interests of the state and its defensive power. Success will be promoted in the activities of the people's control groups in the new training year by selection of people for them who are highly trained, who possess a sense of responsibility and who are capable of fighting shortcomings in accordance with party principles. Further intensification of party leadership of people's control organs is a guarantee of their greater effectiveness in successfully completing the great and important tasks posed to the armed forces by the party.

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## AIR FORCES

### FLIGHT SCHOOLS: GRADUATES OF ARMAVIR PILOT SCHOOL DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 12, Dec 81 p 11

[Article by Lt Col Ya. Degtyarev: "Generosity of the Heart"]

[Text] Each graduation of engineer-pilots has always been a remarkable event in the life of the schools. During the ceremonies the lieutenants say many kind words about their school, and they express sincere gratefulness to all who taught them.

Gold Medal graduates of the Armavir Higher Military Aviation Pilot School Anatoliy Krasikov, Yevgeniy Lushnikov and Vladimir Sveshnikov and honor graduates Aleksandr Zhupikov, Vladimir Kudryashov and Sergey Dyul'din thanked with special warmth the senior instructor of the aerodynamics department, Engineer-Colonel Yu. Zamotrin.

Yuriy Ivanovich has a perfect knowledge of his subject. For the last 15 years he has been nurturing the young students' love for this discipline, so highly important to the fighter pilot. Broad knowledge, pedagogical tactfulness and high exactingness won him the respect of the students. The author tries to make each lesson creative.

The silence in the lecture hall was one of anticipation. The first-year students were waiting with unconcealed interest for the lecture on aerodynamics to begin. Complex diagrams and difficult formulas were already up in front of them. And suddenly the lecture began in a totally uncustomary way.

"How long have people been flying in heavier-than-air craft?" Engineer-Colonel Zamotrin asked the students, and then he himself replied: "Only since the end of the last century. That's how young aviation is, but consider how impressive its achievements are. Aerodynamics is a serious science, and it requires thinking in three dimensions, not just in a single plane," the instructor continued. "Beginning students experience certain difficulties with the abundance of special terminology. Some of them even become confused at first. But if they desire to learn and if they remain diligent, the uncertainty quickly passes."

From one lecture to the next the instructor gradually introduces the subject to the students, making them interested in studying it right from the start. It is after he completes such an introduction that he takes colored chalk in hand and covers the blackboard with complex formulas, diagrams and various graphs. Zamotrin's narration is always to the point, understandable and supported by persuasive examples from flight practice.



Yuriy Ivanovich developed his own style of testing based on his teaching experience. The officer believes that much depends on how a question is formulated. It may be given in a way requiring the student to simply demonstrate his ability to memorize material, to demonstrate good memory. Or a question can be posed in such a way that the student must approach the answer analytically, and use the method of comparison. This is the way a problematic situation is created in a lesson, and the way the problematic training method is realized.

Engineer-Colonel Zamotrin works in close contact with other instructors. Colonel V. Simorov, the department chairman, does everything he can to encourage a creative, unconstrained exchange of opinions, during which new ideas that can systematically improve the training methods are born and tested out.

This department also sets the tone for renovating and improving the laboratory and training base and for equipping it with technical training resources. A model of an L-29 made to one-tenth scale with operating aerodynamic controls and mechanized wings was created on the initiative of the instructors and is now being competently used. It provides the students with a real impression of the actions taken by a pilot controlling an airplane.

The successes of the future pilots and growth in their theoretical knowledge elicit a sense of pride in the instructors. For example, Lieutenant A. Zhupikov received a diploma with honors when he graduated from the school. Yuriy Ivanovich remembers well how difficult it was for Aleksandr to study aerodynamics: His insufficient theoretical training had its effects. But an interest in this science, so necessary to the aerial warrior, and the joint efforts of the teacher and students helped to surmount the difficulties.

The teachers encourage their students to join circles sponsored by the military scientific society. Lieutenant Yevgeniy Lushnikov, who graduated from the school with a gold medal, demonstrated an embryonic ability to conduct research while a member of such a circle. His substantial report on the comparative characteristics of modern Soviet and foreign airplanes from the standpoint of their maneuvering capabilities received a high grade from the military-scientific society.

The students study this highly important discipline not only in the lecture halls but also in the air. Thus, analyzing a flight by student V. Atamantsev together with his colleague, Lieutenant Colonel I. Lysenko, Yuriy Ivanovich discovered that the future pilot lost a great deal of altitude while performing descending maneuvers. Such an altitude loss is typical of an airplane at certain speeds. The student was given clear recommendations on what to do in a concrete situation and on how to ensure flight safety.

Rare they may be, but problems also do occur in the work of the teachers. Student S. Pryadko found himself in an extremely difficult situation during a training flight aboard a fighter. The incident was interpreted differently by different students. Instructor Zamotrin gave competent, thorough answers to all of their questions.

"The sole reason behind Pryadko's incorrect actions," he emphasized, "was a poor knowledge of aerodynamics."



After graduating from the school, Lieutenant Pryadko was transferred to a line unit. After a short while the unit returned its evaluation: Omissions in the young officer's theoretical training were making it harder for him to fall into line. Such failures are highly distressing to the instructors. To them, they are a reflection of their own shortcomings. And so they tackle their jobs more energetically, and become more exacting toward themselves and their students.

Analysis of successes and mistakes encourages the colleagues of the school's department of aerodynamics to maintain closer contacts with the instructor pilots. They draw up all documents having to do with flight safety together. A complete training course has been foreseen for young instructors. Pilots readily go to the department for advice, and they always receive qualified assistance.

The students love their instructor, Yuriy Ivanovich Zamotrin, for the generosity of his heart and his responsiveness, and they respect his passionate love for the party. They trust him with matters of the greatest confidence.

"He fills us with energy and gusto, he literally wakes our minds up. He teaches us to display initiative and to constantly seek out new ideas in the training and indoctrination of the future pilots," Officer I. Lysenko said about his senior comrade. "Our department's communists have elected him to the party organization."

Yuriy Zamotrin received his first combat decoration--the Medal "For Defense of the Caucasus"--15 years ago. Later on the frontline soldier's chest was decorated by two orders of the Red Star, two medals "For Combat Service," and others. The officer is rather reluctant to speak about himself, but he takes pleasure in describing the heroic deeds of his fellow servicemen--technicians, mechanics and motor mechanics.

Happy news came to the school in the year of the 26th CPSU Congress: Engineer-Colonel Yuriy Ivanovich Zamotrin was awarded the honorary Badge "For Outstanding Successes in the Higher School" by Order of the USSR Minister of Higher and Secondary Specialized Education. The comrades warmly congratulated the veteran. And in response they heard:

"This award places many obligations on me."

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## AIR FORCES

### FIGHTERS: PLANNING AND FLIGHT SAFETY DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 12, Dec 81 pp 28-29

[Article by Lt Col F. Akchurin, military pilot 1st class: "A Lost Hour"]

[Text] Everyone knows how important planning is to flight organization. But many shortcomings can still be observed in this work, something that requires deep knowledge, firm habits and a creative approach. Various miscalculations have a negative effect on the quality and effectiveness of aerial skills and on flight safety. It is bad when the mistakes are made owing to the insufficient experience of commanding officers. It is doubly sad when they are made due to their inattentiveness and poor control over the activities of their subordinates.

The squadron commanded by Lieutenant Colonel V. Tarasov was preparing for flying. The airmen carefully studied the conditions in which they were to perform their exercises and the requirements of the guidelines, they worked on the trainers, and they passed their tests. Everything seemed to be in order. But this was far from so in fact. The senior supervisor had been unable to check out the planning table for the flight shift until after the initial preparations were made. Even a cursory acquaintance with it was enough to reveal that 1 hour of flying time had not been accounted for.

They began analyzing why this had happened. Those responsible were soon discovered. It turned out that the subunit commander, who had ordered his deputies to draw up this document--the law of the flight day, gave it only a hasty examination, and naturally he did not reveal the mistake.

But one hour of flying time means a great deal to the training of air warriors. It means an average of several extra take-offs (even if the number of airplanes ready to go is small), and each sortie may be significant to the advancement of pilots in the training program.

Attempting to excuse his error, the squadron commander uttered:

"We have some pilots that aren't doing anything. We'll just add some to the schedule...."

At first glance his suggestion seemed reasonable. But on thinking deeper, it is not difficult to see another mistake. The senior chief was compelled to give

orders to leave the number of flights unchanged and to increase the time between them. This decision was based mainly on a concern for flight safety: To plan in more air crews after the preliminary preparations were made would mean deliberately causing a violation--allowing an unprepared pilot to go out on an assignment.

Thus the squadron lost an hour of precious time. Just this example alone is enough to realize how much damage incompetent planning can do to the quality and effectiveness of the aerial training of airmen. Each mistake carries the price of failing to complete the plan for the week or month, or of errors and near-accidents in the air. This is why the importance of these issues was emphasized specially by inspectors during their critique of the mistake made by Communist Officer V. Tarasov and his deputies. They once again focused the attention of the executives on the high requirements imposed on planning and on plan fulfillment by the proceedings and decisions of the 26th CPSU Congress. These requirements are fully relevant to us, the military airmen.

Combat training cannot proceed successfully in the subunit and unit today without purposeful, creative planning. The flight planning table, when it is signed by the regiment commander, becomes the law of the flying day. The efforts of all servicemen having a part in the flying must be concentrated on strict and precise fulfillment of the plans. It stands to reason that when they draw up the planning table the squadron commander, his deputies and the flight commanders must consider a number of factors: the flying, moral, psychological and physical training of the air warriors, the availability of equipment and support resources, the weather conditions, the training level of specialists of the air engineering service and many others. In other words they must consider even the details which might at first glance appear insignificant but which may have a positive or negative influence on the rhythm of the flight shift and on its end results.

This is precisely the approach taken to flight planning in the squadron commanded by Major G. Abdurakhmanov. The work is done here thoughtfully, with initiative, complying strictly with the methodological sequence of airman training. The subunit's flying is usually planned to be the most intensive in the second through fifth hours. The reason for this is that at the beginning of the flight day the pilots and aviation specialists need time to work themselves into the daily rhythm, and the commanders need time to see if everything is going as it should. Such time is therefore allowed. And toward the end of the flying day people get tired, meaning that it is better to reduce their load somewhat. Thus the most favorable time is used for intensive combat training.

But drawing up the planning table competently is only half of the battle. The main thing is to see that it is followed precisely. Here as well, in my opinion, much depends on the flight leader. He implements the commander's decision, coordinates the work of the airmen, controls it and orients the people toward solution of concrete problems.

I would like to emphasize that the plan is not an end unto itself; it is only a means of achieving continual growth in the proficiency of the airmen. This is precisely why the flight leader is given rather broad authority by the appropriate fundamental documents. As an example he can change the take-off times of airplanes (helicopters) during a flight shift, he can permit crews to fly additional sorties

to practice piloting techniques aboard combat training airplanes and combat airplanes in accordance with the exercises planned for the day (night), and he can act on his own discretion in a number of other cases. But at the same time the flight leader must always be the chief guardian of flight safety. Unfortunately far from all flight leaders remember this most important obligation of their lives.

While at the command dispatching point (the control tower), some comrades try to fulfill the plan at any cost, "closing their eyes" to obvious deviations from the rules of flying. As a result we encounter cases of reducing the time for preparing the aircraft and performing the flying assignments, taxiing at high speed and so on. Nothing good can be expected from such liberties: They are a threat to safety. Let me cite some examples.

The right strut of the airplane's landing gear would not go up after take-off. Acting according to the instructions, the pilot aborted his mission and, on returning to the airfield, completed a normal landing. Why did the strut remain down? They began looking for answers. It was found that the taxiing speed had been exceeded, because of which the load experienced by the brace was excessive, causing it to break. The airplane was put out of action for a certain time, and the flight shift failed to complete its combat training plan.

Officer V. Turkin made a mistake in his landing course. The flight leader should have instructed him to come around for a second approach. He did not do so. Thus the danger of a near-accident appeared.

Things of this sort never happen in the squadron commanded by Major G. Abdurakhmanov. Here the officers who are appointed flight leaders themselves comply with the rules unfailingly, and they require the same of all others who participate in the flights and in their support. Each violation of the rules of aviation is immediately evaluated, and both the command and the party organization deal harshly with the offenders. This has a positive influence on the air warriors and on the aviation specialists supporting the flights of the soldiers.

The flight planning table regulates not only the time and order of exercises but also the time of airplane (helicopter) preparation on the ground. When the schedule is made too tight, haste and inattentiveness often arise. The consequence of this is mistakes.

Once a certain young pilot was forced to return from the landing strip to the centralized fueling station. The problem was that prior to take off it was discovered aboard his fighter that the cap was not secured properly to the fuel tank, and kerosene was leaking from it. Why did this happen? It was discovered that Senior Lieutenant of Technical Service A. Ratsokaukas violated the airplane preparation procedures, having failed to check the work of his mechanic. As a result the sortie had to be aborted.

Of course these facts do not typify the work of our district's air units and sub-units. I mention these cases only to reemphasize the main point: Safety is endangered wherever planning discipline is violated. And on the other hand, if the flight preparation plans are drawn up thoughtfully both in the long range and for each flying day, the results of the combat training are highly successful.

Take as an example the squadron in which Major G. Abdurakhmanov serves. Only one of its pilots has a 2d class rating: All the rest are first class. This subunit is confidently leading the socialist competition.

It stands to reason that sometimes the requirements of the planning table are not met for objective reasons. Not that long ago we had to cancel night flying because of birds creating a hazard. We have also had to do so due to bad weather. Such "corrections" in flight work cannot be excluded completely, but these are dictated by exceptional circumstances, and not by the carelessness of executive officers.

Setting our sights on unconditional, complete fulfillment of the plans, the 26th CPSU Congress directs us, the military airmen, onto a dependable path for strengthening combat readiness, raising aerial proficiency and ensuring flight safety. This is important to remember now, at the beginning of the new training year. Winter is a time of intensive flying in adverse weather. Special attention and constant concern must be displayed in organizing and conducting these flights.

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## AIR FORCES

### SUPPORT SERVICES: RADAR GUIDED LANDINGS DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 12, Dec 81 p 33.

[Article by Maj V. Moshkov: "In the Zone of the Landing Radar"]

[Text] The flying shift was in the peak of its activity. There was an incessant roar of jet engines above the airfield. But in the radar landing system room things were relatively quiet. Displays reflecting the aerial situation glowed in the twilight. Captain V. Arzhanov was at the landing leader's console. Next to him was the dispatch radar operator, Warrant Officer M. Galkovskiy. Radio mechanic Private A. Tishchenko and electrician Private A. Filippov were working in the neighboring room. The specialists were alertly standing by.

A message from a pilot broke the silence.

"This is four-two-six, on the approach course."

The ground station immediately transmitted the required data back. It was still too early to make the final turn. Just a few seconds later Captain Arzhanov transmitted a command to the crew from the landing radar station:

"Four-two-six, make your final turn, over...."

Warrant Officer M. Galkovskiy was controlling the airplanes until they entered within the range of the landing radar. He took care to see that the fighters would begin their approach at precisely set intervals. Officer Arzhanov monitored the actions of the operator.

The radio exchanges were short. Not a single extra word must clutter up the airwaves.

"I'm on my landing approach, the landing gear is down, my altitude is..." the crew commander reported.

"Begin your descent, over..." the radar station replied.

It would be difficult for the uninformed individual to imagine how much information is contained in these short phrases: Each of them represents precise mathematical calculations giving a full impression of the pilot's readiness for landing, of the

nature of the aerial situation at the moment, of the fighter's distance from the radar station and so on. This information helps the pilot to line himself up exactly with the landing strip and to descend strictly in accordance with the vertical speed table.

At a certain distance Captain V. Arzhanov, an experienced landing leader and a top-class specialist, takes control of the crew. One of his jobs is to break in young operators. Lieutenants V. Gonchik and V. Skripkin underwent retraining under his guidance. Now they are fulfilling the responsibilities of landing leader independently.

Valeriy Pavlovich is an active efficiency expert. His proposals have been aimed at raising flight safety and the reliability of communication apparatus. In particular the office built a light signal panel graphically displaying the course and glide path information of a fighter coming in for a landing. Practice demonstrated that the innovation possesses many advantages and that it is useful.

Flying was of moderate intensity on this day. But Valeriy Pavlovich knew that it is precisely in such a situation, when people begin to relax, that mistakes can be made. Therefore he constantly keeps the alertness of each crewmember high, so that the attention of the soldiers would not stray. And he himself keeps a watchful eye on even the slightest deviations of the airplanes from their glide paths. Once while watching the screen of the landing radar the officer riveted his attention on a slight leftward deviation of the return from the fighter. The captain reacted immediately:

"Four-two-six, your range is eight, go right forty...."

And as long as the station's resolution would allow, Arzhanov observed the airplane without removing his gaze from the display: Control of a fighter is especially important during landing, a critical stage of flying.

The equipment of the radar landing station was operating faultlessly, as it does incidentally during other flying shifts. Private A. Tishchenko who was under Captain Arzhanov's and Warrant Officer Galkovskiy's tutelage, had turned on the station early, before the flying started, as is required by the guidelines, and he checked its operation one last time. His teachers had imparted to him the habits of tuning the instruments to their optimum performance. Private A. Filippov was responsible for maintaining the voltage in the electric circuit. There were fighters in the air, after all, and were power to be shut off suddenly, communication with the crews would be lost. The radar station's equipment would have to be switched quickly to self-contained power sources. All of the young specialists have been trained how to do this. They have also mastered associated occupations.

The next fighter approached the airfield. But Captain V. Arzhanov offered no instructions: The airplane was landing with the help of his instrument landing system. This system made the work of the pilot and the landing radar station crew much simpler, and it increased the precision of landing strip approach and flight safety. But this did not diminish the landing leader's responsibility in any way. This is why the officer continued to monitor the airplane's descent attentively on the display.

The fighter landed precisely. The other crews landed just as well. This was owing in many ways to the efficient work of specialists of the landing radar station, who were ready to come to the assistance of the pilots at any moment. Not that long ago their high alertness and competent actions were responsible for the safe landing of an airplane flown by a pilot who was flying in automatic and who suddenly found himself in a rather complex situation.

The flying shift came to its end. A grade of excellent was awarded to the support given by the landing radar station crew. They deserved it. The soldiers of the radar aircraft landing system are successfully fulfilling socialist pledges they adopted in honor of the 26th CPSU Congress, which contained this item: wage a constant effective struggle for flight safety and for higher combat readiness of the subunit.

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## AIR FORCES

### SUPPORT SERVICES: IMPORTANCE OF 'CAN-DO' ATTITUDE ON FLIGHT LINE DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 12, Dec 81 pp 34-35

[Article by Lt Col M. Novikov: "Nurturing Industriousness"]

[Text] Once during night flying Guards Senior Lieutenant of Technical Service A. Yefremov, an aircraft technician, discovered a defect in a machine unit located in a hard-to-reach place during an inspection of his winged craft. The squadron deputy commander for the air engineer service talked approvingly about the officer's actions and then explained the typical signs of the defect to the specialists. He described which preventive measures should be taken, and how the malfunction could be predicted. The officer technicians noted down all of his instructions for future use.

But next day Yefremov nearly received a reprimand. What happened? The technician was correcting a fault. It was freezing, a strong wind was blowing, and the work had to be done with the help of portable lamps. Despite the difficulties the technician completed the work he was doing, irreproachably he thought. The chief of the flight's technical maintenance unit was absent at that time: He had been detained by certain matters at the equipment warehouse. Seeing that it was getting dark, Yefremov once again tested out the systems and told the mechanics to put the hoods on the airplane.

"The equipment is in full working order," he reported to the chief upon the latter's return.

The officer felt that he had displayed initiative and efficiency. But the chief of the technical maintenance unit was in no hurry with the praise; instead, he ordered the mechanics to remove the hoods from the fighter and to dismantle some of the pipelines. It was found that due to inexperience, the technician had accidentally weakened the connection of the switching cable of the airplane's electric equipment system. This was a gross violation of the requirements of documents regulating equipment operation. Before closing up the hatches he should have reported completion of the work to the chief. But the officer did not do this. Thus it happened that he became a bad example to his mechanic and to other junior air specialists.

Much is being done in this squadron to strengthen discipline and order, but certain shortcomings are still encountered.

Aviation does not tolerate carelessness, negligence and violations of job and military discipline. This is all the more true of today's supersonic aviation. It imposes high requirements upon every specialist. And if every specialist is to stay on top of things, he must have a faultless knowledge of the systems and machine units, of the physical processes occurring within them and of the operating features, he must perform all jobs punctually and precisely, and he must comply strictly with the requirements of the manuals and other guidelines. One would think that this is clear. But some soldiers believe that the main thing in the work of an air specialist is to service an airplane well and on time, and that everything else is unimportant. It's no big deal, they say, if a technician reports completion of an assignment to the leader of the air engineer service a little late, or the condition of his uniform and that of the mechanics leaves something to be desired, or if the mutual relationships between the specialists are far out of line.

No, these are serious evils. It is no accident that the discussion of the value of high industriousness and order in all units of the economic machinery was so deep during the 26th CPSU Congress. It was emphasized that discipline is the foundation of organization and of raising the effectiveness of the labor of Soviet people. Without firm discipline the complex missions facing military airmen cannot be fulfilled successfully. This is always in the minds of the best air subunits of our district. Together with the political workers, staff officers and the party and Komsomol organizations, the commanders take steps to strengthen order and encourage proper relationships between airmen, and to create a healthy moral microclimate in the collective. It is with this purpose that they hold conferences and rallies, in which the airmen exchange their experience in indoctrination work and in the use of the recommendations of military education and psychology. Lawyers give lectures to them. Participants of the Great Patriotic War and air force veterans are frequent guests of the collectives. They describe how high organization and firm order helped the frontline soldiers to win.

More than half of the personnel of the air engineer service in which Guards Captain of Technical Service V. Shul'gin serves are specialists 1st and 2d class. A high percentage of the unit's airplanes have an excellent rating. The airmen maintain the fighters in constant readiness for take-off, and they keep serious malfunctions from occurring in the work of the equipment. There are no gross violations of discipline, of the manuals or of instructions and regulatory documents. This is a result of well organized indoctrination of subordinates by executive officers of the air engineer service. As an example Guards Senior Lieutenant of Technical Service S. Parshin, an aircraft technician, has had a relatively short work career thus far. But he is proving to be a qualified, diligent and disciplined specialist. Recently Officer Parshin became one of the winners of the socialist competition. His airplane was named the unit's outstanding craft.

From the very first days of S. Parshin's work in the regiment, Guards Major of Technical Service V. Gerasimenko, Guards Captain of Technical Service V. Shul'gin and others tried to nurture his industriousness, diligence and sense of responsibility for assigned work. Observing the work of the young officer, the experienced specialists took note of his aspiration to master the habits of servicing the equipment more quickly, and they supported this quality in him. Whenever he made a

mistake, or for example when he did not explain the jobs to the mechanics clearly, they corrected him and advised him how he should act.

One day Parshin's fighter took off on a mission. Soon after taking off, for some reason the pilot requested permission to land. After he taxied in, the technician asked him to report on the work of the materiel, as he usually did.

"See if you can figure out what's wrong with the station," the pilot replied.

Parshin called in the radio specialist, and the two of them began seeking the cause of the malfunction. They found that a mechanic had been careless when tuning the apparatus. He had done his work without a checklist or flow chart, relying only on his own experience. And Parshin failed to check his work out as he should have. This was a good lesson for both.

There was much discussion at this time in the squadron about work excellence, industriousness and the responsibility of the air specialist. Experienced technicians told the young soldiers the sequence they should follow in checking out each operation and in inspecting the work of each specialized mechanic.

One of Parshin's subordinates was an industrious and diligent mechanic, Private V. Guley. He was competent, and he put his full energy into each job. Once the officer suggested that they earn an excellent rating for the airplane. Guley readily agreed. Young technicians V. Yashen'kin and V. Yakushev had the same aspiration as well. Executives of the squadron's air engineer service offered their support, organizing a technical circle. Communist V. Zveryanskiy, who had a master qualification, took charge of it. Plans were made for independent study and for training the technicians in the most complex operations: making preparations to attach ammunition to the pylons, using instrumental control resources, working with flight recorder tapes and observing flight discipline.

The focus was placed in such lessons not only on how well the specialists did their jobs but also on how the officers led their mechanics: on how they formulated their instructions and how they monitored their execution in accordance with the guidelines. Attention was also turned to the example set by each technician, to his self-control, technical culture and industriousness, so that even his external appearance would encourage a proper work mood among the people and nurture discipline.

Serious attention was devoted to prompt handling of documents. Prior to this, incidentally, there had been cases in which generally competent specialists were given a low grade by the regiment's engineers during airplane inspections because they did not always enter the testing results into the appropriate documents on time. Some postponed filling in the log books of the machine units and did not record their working time, while others filled out the airplane preparation log sheets incorrectly. In other words they were given a low grade due to carelessness and a lack of industriousness. And this had a serious effect on the course of the competition.

It should be noted that the chiefs of the flight technical maintenance units have recently intensified their exactingness toward their subordinates. They have

introduced permanent weekly control of the state of the documents. To make work with them easier for the specialists, displays showing samples of the filled-out logs and log books were set up.

Communists are dependable helpers to the commanders in nurturing industriousness in the soldiers. Party bureau member Senior Lieutenant S. Parshin and other active party members are perpetually analyzing the moods of the people and their needs and interests, they talk with them about the requirements of the oath and the manuals, they make an effort to create an atmosphere of efficiency and mutual exactingness in the collective, and they are actively fighting to keep the combat readiness of the airmen high and military order firm.

In particular, party activists watch over the leisure time of technicians prior to important flights, suggesting ways in which they could spend their time off. The squadron's communists are the ramrods of all new and progressive ideas. Using the wall newspaper and individual and group discussions, they tell the personnel what lies ahead in the socialist competition and what the secret of success is, mandatorily emphasizing that the high industriousness of one and all is the backbone of flight service.

Thus, publishing a flash bulletin devoted to the successes of communist S. Parshin, activists used concrete examples to describe how the technician developed diligence, industriousness and organizational capabilities within himself.

The technicians and air specialists keep a critical eye upon their contribution to fulfillment of the plans facing the squadron, and they are fighting with a sense of personal responsibility for new successes in raising alertness and combat readiness.

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## AIR FORCES

### FLIGHT SCHOOLS: FABRITIUS FLIGHT ENGINEERS' SCHOOL DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 12, Dec 81 p 36

[Article by Eng-Capt V. Talitskiy: "What Future Engineers Are Doing"]

[Text] Waves break against the ancient fortified wall of the beautiful Daugav-- a witness to the former power and glory of this northwestern land. In its time, the Dinaburg fortress dependably blocked the road of Napoleon's troops who, after being unable to subjugate the heroic garrison, were compelled to alter their route of advance toward Petersburg.

With time, the purpose for which the fortress was originally intended eroded away. And after the Great Patriotic War it became the home of a school for junior air specialists. Later on it was fated to become the Daugavpils Higher Military Air Engineer School imeni Jan Fabritius. For more than 30 years this training institution has honorably supplied specialists to the units and subunits of the air force. The school perpetually receives reports from the air force units about the development of the young officers, about their work and about how well they were mastering the complex aviation equipment.

Everything the specialists need for their theoretical and practical training is available here. The students study in spacious lecture halls and laboratories outfitted with operating stands and mock-ups, trainers and simulators. Most of the visual aids were created by the instructors and students.

Aviation equipment and the methods of its operation are growing more complex, but the training material base is not falling behind the growing requirements. Officers Ye. Belikov, I. Sereda, I. Popov and others are managing the work of creative groups and technical circles. Many efficiency experts have been awarded decorations and diplomas of the Exhibition of the Achievements of the USSR National Economy for introducing original technical concepts, and many have earned the right to participate in the traditional exhibitions of the scientific and technical creativity of youth.

"My advice to you would be to visit our training airfield," suggested Engineer-Colonel G. Dement'yev, the school's deputy chief for the air engineer service. "We recently renovated our museum display of different types of airplanes there. There are interesting new things to see."

Georgiy Mikhaylovich Dement'yev is one of the school's veterans. Long ago, in the postwar years, he worked with other instructor-officers and subordinates to clear up the wreckage left by the hastily retreating German troops. He helped manage construction of the post, the training buildings and the service buildings, and creation of the airfield, where several departments of different specialties could study together at the same time.

The planking of miniature landing strips, taxiways and airplane parking pads are artfully laid out at the training field. All classes studying the cycles of aircraft maintenance and operation meet out here. The instructor-officers give lectures here, while the students reinforce the theoretical material with practical lessons using the equipment. Thus after finishing a cycle of lectures on equipment design, Engineer-Colonel I. Ivanov used a concrete type of fighter to demonstrate the methods of tuning the radio apparatus. Such a training method raises the interest of the students in the lessons and helps them assimilate the subject matter more deeply and use their time more effectively.

Before, as an example, the students did not get any hands-on experience with the airplanes until the last stage of the training. Now the students are acquainted with the aviation equipment beginning with their first year. At first they are allowed to perform simple operations: inspecting the airplane according to established procedures, and fueling it. Gradually the instructors make the assignments more complicated. As a result, by the end of their training the future specialists easily perform all forms of ground preparation and maintenance, they can predict faults, they can make the engineer calculations associated with the technical resources, and they can competently manage the actions of subordinates.

Of course this comes not right away but in the course of hard training. Integrated tactical-special exercises, which are held regularly at the school, are a serious examination for the students.

For example, during preparations for such an exercise on the topic "Air Engineer Support to the Tactical Flight Exercise" officers A. Saytkulov, G. Dement'yev, Yu. Shimanovskiy and others gave lectures in the subunits, conducted discussions, described the features of the forthcoming measures and offered advice on how to complete the task in the best way possible. Under the guidance of their experienced mentors the personnel were to gain an impression of the work of unit air engineer service executives during tactical flight exercises, and acquire the habits of drawing up the plan and making the engineer calculations. The students were to participate actively in party-political work as well.

The exercise took several days. The soldiers were redeployed to a back-up airfield, where they set up equipment for the repair and restoration of aviation equipment with simulated damage. The specialists took turns acting as flight and group technical maintenance unit chiefs, as squadron and regiment deputy commanders for the air engineer service and as specialized engineers; they eagerly participated in organizing the work stations and sections, and they did riveting, welding and other jobs. So that the material could be assimilated better, cadets were assigned to each student officer so that they could absorb the experience of their senior comrades. The future engineers gain the ability to make competent and valid decisions independently in such lessons.

The years of intense training pass, and the young engineer-lieutenants leave for air force units. But they keep in touch with the school. Questionnaires are sent to commanders and political workers. The instructors often visit the units in which the school's graduates are serving. The goal of such trips is to study the development of the young air engineer service officers more deeply and to reveal new reserves for improving the quality of their training.

During one meeting Engineer-Lieutenant Colonel S. Kakurin discovered some shortcomings in the training procedures, as a result of which some officers experienced certain difficulties in organizing socialist competition among specialists of the air engineering service. Considering this, the school administration made some wise changes in the training and indoctrination. They began calling in experienced commanders, engineers and political workers more frequently to give lectures at teacher training rallies. Changes were also made in the program of tactical-special exercises. The future engineers were encouraged to take a more active part in the technical critiques, and they began to be taught more objectively how to summarize the work results of air engineer service specialists, how to introduce the advanced skills in preparing aviation equipment for flying and how to maintain a healthy microclimate in the military collective.

Multiplying the glorious traditions of the school, the instructors, students and cadets are preparing to honorably meet a remarkable event in the life of our country--the 60th anniversary of the USSR's formation.

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